UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/072,206	06/04/93	SCHWARTZ R	INTT3POUS

MANCUSO, EXAMINER

E6M1/0708

WARREN A. SKLAR
RENNER, OTTO, BOISSELLE & SKLAR
1621 EUCLID AVE, 19TH FLOOR
CLEVELAND, OH 44115

ART UNIT	PAPER NUMBER
2616	18

DATE MAILED: 07/08/96

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 4/8/96 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire three month(s), ____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
3. ☐ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of Informal Patent Application, PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____.

Part II SUMMARY OF ACTION

1. ☒ Claims 1 - 11 are pending in the application.
   Of the above, claims 6, 7, 11 are withdrawn from consideration.
2. ☒ Claims 12 have been cancelled.
3. ☒ Claims 1-5, 10 are allowed.
4. ☒ Claims 8, 9 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____ ; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

1. This application is a rule 1.29(a) application and the previous after-final amendment and the amendment filed 4/8/96 (which includes the amendments in the after-final amendment) have been entered. Therefore, the pending claims are 1-11, with claims 1-5, 8-10 being the elected claims and claims 6, 7, and 11 being withdrawn as directed to a non-elected invention. It is further noted that claims 1-5, 8-10 were elected without traverse in paper number 11.

2. Applicant's remarks filed 4/8/96 (as well as in the after-final amendment) have been fully considered and, for at least the below rejected claims, were not found to be convincing. However, the 112 rejection is hereby withdrawn in view of applicant's amendments and remarks (though new ones are added below), as are the art rejections of claim 1-5, 8 and 10.

3. Claim 8 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, last paragraph, the recitation is directed to "determining a difference in the two measured heights" while the previous paragraph makes reference to "each contact point". However, the claim recitation as a whole is unclear as to exactly what these "two contact points" are. Are they where the probe contacts different contact or something else? This needs to be clarified. Further, the claim recites determining a difference

which is "representative of the length of the probe tip" (last 2 lines and similar recitation in the preamble), but the claim is unclear as to exactly how this is actually being determined from the preceding claim recitation. In other words, the conclusion (determining the length of the probe tip) does not appear to result from the preceding claim recitation.

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

5. Claim 9 is again rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Stewart et al. ('374) and Sato et al.

The statements advanced in paragraph 4, of paper number 12, as to the applicability and disclosure of the references are incorporated herein.

6. With respect to applicant's remarks directed to this claim (9), while they have been fully considered, they are not found to be convincing. Firstly, the recitation in this claim is extremely broad (much broader than the recitation in the other independent claims) and the actual claim language is met by the references. Specifically, as to the rejection of claim 9 and the remarks on page 6 of the response, the references show the inspection of probe cards containing probes and determining various characteristics of the card. Both Stewart and Sato disclose determining the positions of the probes (see the Abstract of each reference) in addition to other characteristics. Since the references show determining the position of the probes, these position determining processes must be with respect to something (all measurements of position must be with respect to some reference, or the measurement is meaningless as it has no reference) and the obvious references are with respect to the object the probe is to come into contact with or with respect to the other probes being used (although any other reference frame that is available and relevant, such as a table or card holder (such as 72 and 80, respectively, in Stewart) can also clearly be used). With respect to applicant's remarks directed to the "accumulating a file of relative positions" as argued by applicant, firstly this argued limitation is slightly more narrow

than the actual claim limitation. Further, the process of storing previous determinations of position for use in subsequent examinations is a very conventional operation (Official Notice). Specifically, it is well known to use previously determined information in subsequent processing. For example, in learning systems or for positioning systems which use the previously determined position as a start point for a subsequent start point. To one of ordinary skill in the art, it would have been obvious, at the time of the invention, to keep track (such as a file) of determined positions for future use because of the conventionality of such processes and because of the conventionality of this process for purposes such as calibration (if the determinations were not kept, it would be difficult, if not impossible, to determine how well the system was performing the determination) as well as various other operations.

7. Claims 1-5, and 10 are allowed.

8. Claim 8 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Mancuso whose telephone number is (703) 305-3885.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-8576.

The Art Unit 2613 Fax number is (703)-308-6606.

jm
July 5, 1996

JOSEPH MANCUSO
PATENT EXAMINER
ART UNIT 266